

We claim:

1. For use in a viscous material dispenser, a piston comprising
  - a. a unitary body of circular cross section including
    - I. spaced face and back surfaces;
    - ii. an axial through bore extending between the surfaces
    - iii. the face surface including a nose section surrounding said through bore and an annular recess section surrounding the nose section, the recess section being perimetraly surrounded by a lip;
    - iv. a perimetral surface extending axially from the face to the back surface; and,
    - v. the perimetral and face surfaces together defining a perimetral lip around the concave section, the lip being of tapering thickness tapering from its thickest part at a location nearest the back surface forwardly to a thin termination at a juncture of the face and perimetral surfaces
  - b. an annular disc positioned in the annular recess section; and
  - c. the disc including a peripheral surface coactable with the lip to transmit comprising forces against the lip and thence against a surrounding wall of a cylinder where the piston is in use.  
  2. The pistons of claim 1 wherein the lip flares outwardly as it intends in a forward direction relative to the force and back surfaces.

3. For use in a viscous material dispenser, a piston comprising a unitary body of circular cross section including:
  - a. spaced face and back surfaces;
  - b. an axial through bore extending between the surfaces;
  - c. the bore including a counterbore extending from the back surface toward the face surface;
  - d. the bore a shoulder, the shoulder being an annular drive section circumscribing the bore and adapted to engage a push rod in force transmitting relationship;
  - e. the face surface including a nose section surrounding said bore and an annular recess section surrounding the nose section;
  - f. a perimeteral surface extending axially from the face to the back surface;
  - g. the perimeteral and face surfaces together defining a perimeteral lip around the recess section, the lip being of tapering thickness tapering from its thickest part at a location nearest the back surface forwardly to a thin termination at a juncture of the face and perimeteral surfaces; and
  - h. an annular disc disposed in the recess section and engageable when in use with the lip, in outward force transmitting relationship to press the lip against an internal wall of a surrounding dispenser tube.
4. The piston of claim 3 wherein the lip flares outwardly in a direction from said location toward said juncture.

5. The piston of claim 3 wherein the piston is a plastic piston.
6. The piston of claim 5 wherein the plastic is Delran.
7. For use in a viscous material dispenser, a piston assembly comprising:
  - a. a main body having an axial bore for receipt of a push rod;
  - b. the body having a face including an annular recess and an endless lip surrounding the recess;
  - c. a camming washer disposed at least in part in the recess, the washer including a perimetral camming surface engageable with the lip; and ,
  - d. the body and washer being connected together for limited relative axial movement when the piston assembly is advanced against material in a cartridge to dispense such material,  
such relative movement being effective to cause the camming surface to force the lip outwardly into tight engagement with a wall of such a cartridge.
8. In combination, the piston assembly of claim 7 and a motor driven push rod.